

[illegible]

PATENT

Dear Sir:

Respectfully submitted,

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SEQUENCE LISTING

<110> Donovan, Stephen
 <120> Clostridial Toxin Derivatives and Methods for Treating Pain
 <130> D-2875DIV
 <150> US 09/489,667
 <151> 2000-01-19
 <160> 18
 <170> PatentIn version 3.1
 <210> 1
 <211> 11
 <212> PRT
 <213> Unknown
 <220>
 <223> Description of Unknown Organism: This is a substance P and is very well known in the art.
 <220>
 <221> MISC_FEATURE
 <222> (11)..(11)
 <223> Xaa at position 11 is Methionine Amide
 <400> 1
 Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Xaa
 1 5 10
 <210> 2
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 <212> PRT
 <213> Unknown
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 <223> Description of Unknown Organism: Precursor to substance P, which is very well known in the art.
 <400> 2
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 1 5 10

<210> 3
 <211> 13
 <212> PRT
 <213> Unknown

<220>

<223> Description of Unknown Organism: This is a precursor to
 substanc
 e P and is very well known in the art.

<400> 3

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys
 1 5 10

<210> 4
 <211> 14
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<220>

<223> Description of Unknown Organism: This is a precursor to
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 e P and is very well known in the art.

<400> 4

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys Arg
 1 5 10

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 <213> Artificial Sequence

<220>

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<220>

<221> MISC_FEATURE
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 <223> Xaa at position 12 is Glycine Methyl Ester

<400> 5

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 1 5 10

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<220>
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Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Xaa
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<220>
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<400> 7

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<221> MISC_FEATURE

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<223> Xaa at position 12 is Glycine Ethyl Ester

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<223> Xaa at position 13 is Lysine Ethyl Ester

<400> 9

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<210> 10

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<212> PRT

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<223> Description of Artificial Sequence: This is a carboxy-ester synt
hetic precursor to substance P.

<220>

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<223> Xaa at position 14 is Arginine Ethyl Ester

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys Xaa
1 5 10

<213> Unknown

ino thermal peptide fragment derived from substance P.

Arg Pro Lys Pro
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<213> Unknown

ino acid thermal peptide fragment derived from substance

Arg Pro Lys Pro Gln Gln Phe
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<213> Unknown

ino thermal peptide fragment derived from substance P.

<400> 13

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<210> 14

<211> 11

<212> PRT

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<220>

<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(11)

<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-fo
rm of Phenylalanine, Xaa at position 9 is D-form of Tryp
tophan, X
aa at position 11 Methionine Amide

<400> 14

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Xaa
1 5 10

<210> 15

<211> 12

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: This is an analog o
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ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(9)

<223> Xaa at positon 2 is D-form of Proline, Xaa at position 7
is D-for
m of Phenylalanine, Xaa at position 9 is D-form of Trypt
ophan

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<400> 15

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1 5 10

<210> 16

<211> 11

<212> PRT

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<223> Description of Artificial Sequence: This is an analog o
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<221> MISC_FEATURE

<222> (2)..(11)

<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-form of Tryptophan, Xaa at position 9 is D-form of Tryptop
han, Xaa
at position 11 is Methionine Amide

<400> 16

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Xaa
1 5 10

<210> 17

<211> 12

<212> PRT

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<223> Description of Artificial Sequence: This is an analog o
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ce P.

<220>

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<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-form of Tryptophan, Xaa at position 9 is D-form of Tryptop
han

<400> 17

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Met Gly
1 5 10

<210> 18

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<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>

<221> MISC_FEATURE

<222> (11)..(11)

<223> Xaa at position 11 is Methionine Amide

<400> 18

Arg Pro Cys Pro Gln Cys Phe Tyr Gly Pro Xaa
1 5 10